

ABSTRACT OF THE DISCLOSURE

A frequency converter configured to convert a first current signal having a first frequency into a second current signal having a second frequency different from the first frequency is disclosed, which comprises an adder configured to add the first current signal and a predetermined reference current signal to output a third current signal corresponding to the sum of the first current signal and the reference current signal, and a switching circuit configured to pass only that portion of the third current signal which is larger in magnitude than a threshold current to output the second current signal.